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## Book review

**Forensic Anthropology Current Methods and Practice, A.M. Christensen, N.V. Passalacqua, E.J. Bartelink. Academic Press, Oxford (2014).**

The authors state that their motivation for writing this textbook was to provide “a comprehensive introductory text that approaches forensic anthropology as a modern and well-developed science. This effort includes consideration of forensic anthropology within the broader forensic science community, extensive use of case studies, and discussion of the most recent research, technology, and challenges in the field.” A rationale that I believe on the whole has been admirably achieved.

This book is not a manual for practicing forensic anthropologists, but is rather aimed at students and aspiring practitioners new to the field of forensic anthropology. It has been specifically designed for introductory, undergraduate or upper levels courses in forensic anthropology or forensic science but, as the authors point out, could also be usefully employed by professionals in related fields (forensic science, law enforcement, medico-legal investigators, the judiciary). It is divided into 15 chapters and comprises 448 pages. Each chapter provides informative figures and tables, case studies, a definition of the terminology used (which is helpfully highlighted in bold type throughout the text for easy reference), an area where one can “Test Yourself”, an easy to read bullet point overview of the chapter contents, and a useful bibliography that provides additional references can be found at the end of every chapter. In addition to the photographs provided within the book, there is also a link to the publisher’s website where the original colour images may be downloaded to assist further examination and comprehension.

The first chapter provides a useful overview of the history of forensic anthropology and introduces a variety of forensic anthropologists to the reader with a discussion of their particular roles and responsibilities. This is a valuable addition and provides the student and aspiring practitioner with an understanding of the career paths and potential opportunities that are available within the discipline of forensic anthropology today.

The second chapter discusses the principles of osteology and odontology and briefly covers aspects of bone biology, anatomy and growth and development of the human skeleton and dentition. The following chapters explore skeletal examination and documentation methodologies, principles of skeletal processing and preparation, establishing the medico-legal significance and context of unidentified human remains, and the identification of human versus non-human skeletal material.

Specific chapters also present the principles of how one constructs a biological profile of unidentified human remains and discusses the methods and current research in the estimation of sex,

age, ancestry and stature. Whilst other chapters provide the reader with the principles of skeletal variation, anomalies and pathological conditions, bone fracture mechanics and the analysis of skeletal trauma, and discusses the often complex issues surrounding personal identification. Decomposition, post-mortem soft and hard tissue changes, forensic taphonomy and the various biological and environmental agents known to affect the post-mortem modification of human remains are vitally important to the correct interpretation of a scene and this chapter provides the reader with very useful descriptors and a reasonably current bibliography.

The following chapter on forensic archaeology and scene processing methodologies will also greatly assist the reader who may be unfamiliar with how one documents a scene associated with human remains or buried forensic evidence, with the specific techniques of archaeological excavation, recovery and recording presented in a very accessible manner.

As a practicing forensic anthropologist and archaeologist, I have to disagree with the assertion that “traditional archaeological methods can be very tedious and time-consuming”. But I do, however, agree that the manner in which a forensic archaeological investigation is conducted is very much dictated by the specific forensic context and investigative parameters of the criminal investigation.

Likewise, the discussion of the methods of searching for buried remains using geophysical or remote sensing devices states that these “are not considered standard forensic archaeological approaches”. However, the application of archaeological desktop assessment, detailed evaluation of the landscape, soil-probing, geophysics and remote sensing, and victim recovery (cadaver) dogs are a suite of techniques that are routinely used together to identify clandestine burials here in the United Kingdom.

This chapter would have also benefited from a discussion of the role of the forensic archaeologist in the collection of forensic ecology evidence types (for example soils, pollen, entomology samples) taken at the crime scene. As the scientists undertaking such analyses can rarely attend the scene, these tasks are routinely undertaken by forensic archaeologists here in the United Kingdom for the purposes of matching ecology evidence types to other potential trace evidence recovered from a suspect’s clothing, footwear, tools, home or vehicle. These are, however, small points and, I think, merely demonstrate the differences that currently exist within forensic archaeological practice in the United Kingdom and North America.

The final chapter in this volume discusses contemporary issues in forensic anthropology and includes a detailed analysis of the discipline’s involvement in mass disaster response, disaster victim identification, conflict and human rights investigations and human trafficking and migration routes. Forensic anthropology and the legal system, specifically the US legal system, are also explored in some detail. Whilst it can be argued that this focus is not strictly

applicable to those working outside the United States, it nevertheless provides a valuable background to the original U.S. Supreme Court rulings of *Frye* and *Daubert* and discusses the factors the Court uses to determine whether scientific evidence is reliable (commonly called the *Daubert* guidelines).

In conclusion, *Forensic Anthropology Current Methods and Practice* provides a welcome addition to the growing corpus of forensic anthropology literature. It offers a refreshing and innovative approach to the textbook genre and, importantly, presents current perspectives, new approaches and research directions that are comprehensive, practical and relevant to the student and aspiring forensic anthropology practitioner.

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